

## ABSTRACT OF THE DISCLOSURE

In the event of a bus-reset, the transmission-speed-setting means sets a predetermined transmission speed and stores the predetermined transmission speed in a transmission-speed storage means. Then, the SP-extracting means receives a self-ID packet from another node by way of the bus, the physical layer and the LINK layer. The SP-extracting means extracts information on a transmission speed (SP) from the packet, and supplies the SP to the transmission-speed-setting means. The transmission-speed-setting means compares the SP with the transmission speed stored in the transmission-speed storage means to select an optimum transmission speed and, if necessary, uses the optimum transmission speed to update the stored transmission speed. The extraction of an SP, the comparison of the SP with a stored transmission speed and an operation to update the stored transmission speed if necessary are carried out every time a self-ID packet is received.